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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/012,471	12/12/2001	Osafumi Nakayama	011655	7182

38834 7590 07/08/2005

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EXAMINER

HANNETT, JAMES M

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/012,471

Applicant(s)

NAKAYAMA ET AL.

Examiner

James M. Hannett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 7-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/2/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: An image pickup device with multiple image sensors which combines image data from multiple image sensors to increase the resolution.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 1: Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 09-289,605 Tanabe et al.
- 2: As for Claim 1, Tanabe et al teaches on Paragraphs [0025, 030-0032] and depicts in Figure 5 an image pickup device, comprising a spectroscope which makes an optical image of an object (51) to be picked up as condensed by a condensing lens (52) system incident and which separates the same into two directions (53, 55 and 57), an overall image pickup portion (58) which forms one optical image as separated by the spectroscope as an overall image of the object to be picked up on an image-forming surface disposed with a primary area pickup element (58) through a primary image-forming lens (52) system and which picks the overall image up by the primary area pickup element so as to output an overall image signal, and a detailed image pickup portion (58) which forms the other optical image as separated by the spectroscope as an image on

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an image-forming surface disposed with a secondary area pickup element (58) having a resolution equivalent to the primary area pickup element; (Paragraph 0025) through a secondary image-forming lens system and which picks a part of the overall image up by the secondary area pickup element (58) so as to output a detailed image signal of high resolution.

3: As for Claim 5, Tanabe et al teaches on Paragraph [0023 and 0030] the detailed image pickup unit is comprised with a moving unit which moves the secondary area pickup element to an arbitrary position of the overall image formed on the image-forming surface. Tanabe et al teaches and depicts in Figure 4 that the image sensors (44) that receive light divided by a beam splitter (43) can be moved in order to capture images in different locations, therefore, increasing the resolution.

4: In regards to Claim 6, Tanabe et al teaches on Paragraph [0023 and 0030] jogging (moving the image sensors). Tanabe et al teaches the moving unit is comprised with a position controlling unit which moves the secondary area pickup element to a target position within the overall image as instructed from an external unit. Tanabe et al teaches and depicts in Figure 4 that the image sensors (44) that receive light divided by a beam splitter (43) can be moved in order to capture images in different locations, therefore, increasing the resolution. It is inherent that the motion is controlled by a position controlling unit.

Allowable Subject Matter

5: Claims 2-4 and 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,130,814 Spencer teaches the use of a imaging system that uses a condensing lens (1) a beam splitter (2) and multiple image sensors (CCDs); USPN 4,652,909 Glenn teaches the use of an imaging system that uses a beam-splitter (111) and multiple cameras (130 and 140); USPN 5,532,737 Braun teaches the use of an imaging system which uses a plurality of imaging devices (102 and 104) and receives light from a condensing lens (110); USPN 6,373,523 Jang teaches the use of an imaging system that uses a prism (20) a condensing lens (10) and multiple image sensors (30 and 31); USPN 5,386,228 Okino teaches a system with a condensing lens (1), a beam-splitter (2) and two image sensors (101 and 102).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hannett whose telephone number is 571-272-7309. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett

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Examiner

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JMH

June 22, 2005


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
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